1:Nimuendajú E-5 (1941-1942) 1952
SQ20 Tucuna SQ20

III. SUBSISTENCE

Agriculture

241 [226] Agriculture and fishing are the principal sources of Tukuna economy. If forced to, the Tukuna will go for some time without collecting wild fruits or hunting; but the complete lack of garden products and fish simply spells misery to them.

[462] [476] [462] [442] The garden patch, cleared and burned out of the virgin jungle, is as a rule made exclusively by the men, often in a communal work party, *uajurí;* but some widows, without masculine aid, clear the land and plant in the *capoeira* or secondary jungle growth. Both sexes pile up the rubbish and burn it, whereas planting is carried out exclusively by women and girls. The original instrument for felling trees was the stone ax, whose appearance no one now remembers, but which, according to legend, the culture hero dyəi' stole from the demon təi"ta [tu]"'ta] (see page 131).

The four species of major importance for the Tukuna are bitter manioc, *mandioca brava* (*Manihot utilissima*), sweet manioc, *macaxera* (*M. aipi*),[1] maize, and yam, *curá* (*Dioscorea* sp.).[2] Lacking any one of these four, the Tukuna have a bad time of it, whereas the absence of other edible tubers, such as the sweet potato, and of other plants like sugar cane, pineapple, peanut (*manduví*),[3] and so on, affects them very little.

[773] According to legend, a solitary old woman discovered both the tree which furnished macaxera-like fruits and the art of making manioc flat cakes, beijús. On learning the secret, the men felled the tree and ate up everything; only Deer kept shoots and seeds in a basket (vatu') of which the culture hero dyəi' later robbed him (see p. 131). For this reason the Tukuna refer to a cultivated plant as a pre-Columbian possession by saying that "it first came in Deer's vatu'."

[777] Formerly, only sweet manioc was known to them; apparently bitter manioc and the process of making manioc flour were introduced by the Neobrazilians.

[442] In planting either variety of manioc, a woman goes ahead, armed with a long, heavy, rounded stake of wood with a sharpened point (about 140 cm. by 7 cm. , with which she makes holes in the ground, a female companion trailing behind to insert the plant slips into the prepared soil. This stake (paye'|"n), when not in use, is kept under water near the entrance to the house or clearing, so that it will not dry out and lose weight. It is removed and dried off only on the eve of planting.

243 [773] Maize was not "in Deer's vatu'" but, according to legend, was given to the Indians by aria'na, a great coquette of the upper world, who brought it with her from one of the lower worlds, where she was once forced to sojourn against her will. (See p. 112.)

[462] The planting of maize, done preferably by men, is accompanied by a certain ceremoniousness that is not observed for any of the other plants. The kernels are placed first of all in a gourd of water. The planter then takes a little of this water in his mouth and sprays it over the kernels in order to make them more savory.

243 784 Until the plants reach a certain height he must submit to rigorous taboos. He cannot go near the fire, or eat or even touch the following fish: pirarucú (*Arapaima*

[1] Commonly known in Brazil as *aipi*.—Trans.
[2] A tuber also known as *inhame*.—Trans.
[3] *Arachis hypogaea;* commonly known as *amendoim;* T., tə"t|.

1:Nimuendajú E-5 (1941-1942) 1952
SQ20 Tucuna SQ20

the wild state by the first men, who raised them in their houses. Even today the Tukuna raise very few chickens, since they dislike their dirtying up the house or yard. Their forefathers had an aversion to the flesh but ate the eggs. Of the present generation no one refused to eat chicken with me, but in general they raise them only for sale to the Neobrazilians.

The plague of blood-sucking bats forces the poultry raisers to keep their wards almost always locked up at night in well-closed henhouses. These are generally conical in shape; one that I saw even had a veranda! Ducks, which are not very numerous, were recently introduced, as their name "pa'tu" (P., *pato*, duck) indicates.

With the exception of large mammals and birds of prey, the Tukuna occasionally raise at home the young of almost every species of wild animal that falls into their hands. These animals, all of which have the run of the place, generally stay only a short time in the possession of their original captors, since they are greatly sought after by the Neobrazilians. Others, upon becoming adult, turn wild or almost wild, coming and going at will from house to jungle and back again; they are given food, but no attempt is made to recapture them.

Every year, in the winter, the women and children are in the habit of raising the young of a marmoset called *leãozito* (little lion)[*] by the Neobrazilians. Sometimes two or three may be observed clinging to the hair of their mistress, who thus carries them wherever she goes, giving them masticated food from her own mouth. During the night she shelters them in a conical basket, woven in an openwork technique; it is suspended with the bottom down and is covered with tururí bark cloth, the round entrance being plugged up with a bit of rag. Although these tiny creatures cannot be raised outside this region, they are much coveted by civilized persons.

Fishing

Fishing is the principal occupation of the men, who rarely let a day pass without indulging in it. A boy is taught to fish, from childhood, accompanying his father in the canoe and maneuvering it at his command. Even at the age of six, both boys and girls pass long hours alone in the igarapé or igapó in the small canoes their fathers make for them. At the age of nine or ten many boys are already able to provide the household with the fish required.

The equipment consists of the fishhook, javelin, arrow, harpoon, and arrow-harpoon. According to Tessmann, bone fishhooks were formerly used. I did not succeed in getting data from my informants on this point. They were able to tell me only that in the old days the children used to fish for small fry with the mandibles of the *taóca* army ants (*Ecyton* sp.), called vɔ'/čata in Tukuna. If this is true, then the fish certainly must have been only very tiny and of no economic value.

However, the fishhook (pɔ'/va) figures in the legend of the culture heroes as the property of a demon much older than they (see p. 126). Nowadays the Tukuna do not go off in their canoes without taking one or more reeds with fishhooks of various sizes with which to experiment as soon as they arrive at a propitious place.

[*] Also called *leoncito*, *saguim leãozinho*, and *chichico* (*Cebuella pygmaea pygmaea*, Spix).—Trans.

1:Nimuendajú E-5 (1941-1942) 1952
SQ20 Tucuna SQ20

227 [177] [648] The javelin (čʊ/ĕi) is a length of canna brava some two meters long and having from four to nine points; it was formerly made of smooth wood, today it is made of iron wire with a barbed point. The traders on the banks of the Solimões complain bitterly of the Tukuna for unceremoniously filching the wire from their fences in order to make these spear points, but they are too unbusinesslike to order rolls of this wire to sell retail to the Indians at a good profit.

226 The fisherman casts the javelin, holding it by its butt end. This procedure always gave me the impression that the javelin was the weapon reproduced in the atlas of Spix and Martius, that was formerly thrown with the *estoleca* (atlatl); but no one remembers it today. With the javelin in the right hand, and the paddle held close to the blade in the left hand, the fisherman guides his canoe under the shadow of the trees, silently and slowly.

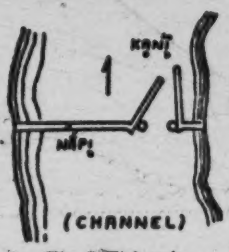

Fig. 5. Fish weir.

151 226 The ability of the Tukuna to discover fish in the depths or at the bottom is truly extraordinary and can only be explained by their spending almost half their time since childhood in this activity. If, while traveling, the Indians pass by a spot that looks promising, they constantly hurl the javelin ahead of the canoe and retrieve it, where the untutored eye sees no sign of fish. The children especially may be seen fishing in this manner and in advantageous places where they do not overlook the slightest possible chance.

226 Especially vulnerable to the javelin are the shoals of fish which swarm up the Solimões in fantastic numbers and enter the tributaries to spawn during May and June. In the river narrows formed by the crumbling and falling of the solid banks, the fish crowd together in such a way that any cast will bring results.

227 Far less used for fishing than the javelin is the bow and arrow. The arrow (na:/nĕ) is a length of canna brava, without feathering and with a barbed point, formerly made of the bone of a sloth (*Bradypus* sp.), nowadays of iron, superimposed on a wooden foreshaft.

[226] The fisherman also often takes with him a reed with a small ball of bone, wax, or heavy wood attached to the end of the line (T., kuiⁿë/jⁿũ; l.g., *uapunga*). With the ball he strikes the surface of the water, thus imitating the fall of fruits, in order to attract certain fish—especially *tambaquís* (*Colossoma bidens*) and *pacú* (*Myteles* sp.)—if he does not obtain the same results by tossing the fruit itself.

[177] The arrow harpoon (T., vjrĕĕ'nĕ; l.g., *sararáca*), which today has a barbed iron point or, if used for turtle (*Emys tracaja*), four spikes, has been in use since ancient times, but not the long-shafted wooden harpoon which, in my opinion, was adopted only after the Tukuna began to inhabit the banks of the Solimões. There it is employed especially in fishing for pirarucú, the principal, and for some of the Solimões Tukuna the only, staple food, as well as an important article of export.

226 At the mouths of the numerous lake channels and at the dead-end arms of the lower courses of the igarapés one almost always finds a weir, *tapagem* (na:'/pį) constructed of bamboo strips. Where it extends close to one of the banks there is an opening between two posts with a movable door (kə'nįⁿ) of paxiuba shoots tied

1:Nimuendajú E-5 (1941-1942) 1952
SQ20 Tucuna SQ20

together with cipó, 180 cm. long, more or less, which permits the fish to enter but not to escape (fig. 5). Nowadays it is the custom to close this door at midnight in order to place the drug (timbó) in the water of the channel by five o'clock in the morning."

Formerly, a cone-shaped basket (T., pęre:'; l.g., *jiquy*) was also placed at the entrance of the weir. This was made of anajá strips, its length being 2.5 m., the mouth 1 m. in diameter; from the mouth inward there was a sort of funnel made of stems with sharp points to impede the return of the fish, once they had entered. With this, as has been already mentioned, the Tukuna use the stupefying juices of certain plants, small bushes called generically "timbó" in the lingua geral. The most active poison is provided by a broad-leafed species, ę'ịn, which crops up nearly spontaneously in old second-growth jungles but is often cultivated as well, even today. Aside from this there are a large-leafed species, va'ị/pę, and one with tiny leaves, na:'mi, both being cultivated. The drugged fish are captured with a dip net, puçá (described on p. 00). Certain fish, such as *acarís*, are even caught by hand.

The species of greatest economic importance are:

Lingua geral	*Scientific*	*Tukuna*
pirarucú	*Arapaima gigas*	dö'ẓi
tambaquí	*Colossoma bidens*	tɔ'makaẓi
curimatá	*Prochilodus* sp.	kauö'ya
aracú	*Leporinus* sp.	ɔ'ta
tucunaré	*Cichla* sp.	tukuna'ri
pacú	*Myteles* sp.	a'ta'činikị
sardinha (P.)	*Chalcinus* sp.	a'raviri
surubim	*Platystoma* sp.	dyu'ta
piranha	*Serrasalmo* sp.	vẽu'ma
trahira	*Macrodon* sp.	dö
matrinchan	*Characinus* sp.	[illegible]

Aquatic chelonians are shot with the arrow harpoon (sararáca), or are surprised while laying eggs on the beach. The turtle of the species *Emys amazonica* (ba:'vẽ), now threatened with extinction, is no longer an important food for the Tukuna; but the species *E. dumeriliana* (tɔri')[11] is still abundant, and it, as well as its eggs, plays an important role in the aboriginal kitchen. The *matamatá* (*Chelys fimbriata;* T., nayarẽ) is rare.

The peixe-boi, or manatee (*Manatus inunguis;* T., a'iruvẽ), is rarely caught. The Tukuna do not kill the red dolphin (*Delphinus* sp.), notwithstanding their dislike for it because it scares away the fish.

Hunting

Game, which was tolerably abundant until about fifty years ago, is now rare because of the rise in the price of leather and the use of modern firearms which are sold to the Indians. In some isolated sloughs a lucky hunter may succeed in killing a tapir, pig, or deer.

[11] Literal translation; meaning not clear. Possibly the door is closed at this time in order to collect enough fish during these hours to justify the use of the drug.—Trans.

[12] On p. 25 this species is given as *Emys tracaja;* on p. 22 the author refers to it as *Podocnemis.*—Trans.

2: Nimuendajú E-5 (1941-1942) 1948
SQ20 Tucuna SQ20

CULTURE

SUBSISTENCE ACTIVITIES

241 **Farming.**—The main *Tucuna* crops are bitter manioc, sweet manioc (macaxera), cara (*Dioscorea*), and maize. The last is planted with some ceremony. There are also at least three species of edible tubers which are not used by civilized people.

226 227 **Fishing and hunting.**—Fish, of great importance to the *Tucuna*, are taken with four- to nine-pronged javelins, arrows, harpoon arrows, baskets, weirs, traps, and a drug made of timbó. The Indians fish almost daily from childhood. On the Solimões, they are expert fishers of pirarucú, an important article of commerce.

224 177 411 Hunting today is unimportant, since game has been depleted to fill the demand for hides. The *Tucuna* now use firearms, but formerly employed the bow and arrow, spear, and blowgun. They also use pitfalls and several types of snares and traps. The blowgun, once the principal weapon, is disappearing.

222 262 [245] **Gathering.**—The wild burity, bacaba, patauá, and açahy palms are of great economic value. Some *Tucuna* plant Brazil nut trees near their houses. They eat certain frogs, Coleoptera larvae, and female red ants at hiving time. They like wild honey but keep no bees.

231 **Domesticated animals.**—The *Tucuna* raise a few chickens, but do not want hogs or other domestic animals because they dirty the premises. They keep young wild mammals and birds uncaged.

412 252 [177] [434] **Food preparation.**—Instead of a mortar, the *Tucuna* use a trough with a half-moon-shaped rocker of thick and heavy wood.

The making of manioc flour, introduced by the Neo-Brazilians, became one of the principal sources of income among the *Tucuna*.

HOUSES

342 The old houses had a small rectangular central portion with a short ridge pole mounted on props. Each end was semicircular, so that the ground plan was oval or nearly round. The walls were of a man's height, and were made of boards of paxiuba or of straw. The house could be sealed tight against mosquitoes. Families occupied the lateral corridors, the central space being reserved for ceremonies. All houses were spacious and well built.

177 342 352 513 The introduction of mosquito nets made house walls unnecessary. People slept on bunks along the walls, covered with mosquito nets, instead of in hammocks. Many houses were built without the semicircular extremities but with a longer central part, being like an open rectangular ranch house with a ridge pole. When the tribe occupied the flood plains of the shores and islands, they built houses on piles.

2: Nimuendajú E-5 (1941-1942) 1948
SQ20 Tucuna SQ20

881 Several hours after midnight, half a dozen of the girl's relatives, holding
[535] her around the waist while her eyes are covered by the feather diadem, dance back and forth toward the wall, which is cut open with a knife so that they finally pass through into the main room. As she is now more exposed to invisible forces, the relatives dance with her until near dawn, then slowly go outside and circle the house. At sunrise they uncover her eyes and have her throw a burning stick against a pole marked to represent the "enemy." She now walks without assistance and dances freely with the others in the house.

[302] Depilation follows. The girl sits on the tapir hide in the middle of the room while three to six women pull out her head hair in little bunches,
[534] accompanied by a small drum (tambor) and rattle. She endures the operation calmly, not even drink being given to alleviate the pain. Her paternal uncle in a vigorous speech then instructs her about her future duties as a marriageable girl.

The masks are now surrendered, each owner receiving a piece of roast meat. The disguises are piled around the girl, until only her head protrudes. The cloth is then ripped and the shreds thrown over the house beams. The turury cloths, which now belong to the host, are wound up and put away.

The seclusion room and roast-meat stand are dismantled. The participants divide the pieces, going in a solemn procession to toss them into
[482] the river. The girl is carried on the tapir hide held by five or six men over their heads in the procession. She undresses, and, kneeling in
[751] shallow water where a magic arrow protects her against water demons, she is washed by all the men who have magical powers. She then redecorates herself and joins the dancers, who perform in the house until the last drop of beverage is drunk. At the end of the feast, everyone
[522] bathes hilariously together, tossing each other into the water.

Formerly, in order to bring a large haul of fish, the girl was washed
[226] again after the feast with a solution of timbó at an appropriate spot on
[789] the creek.

Six to eight months later there is a supplementary but less ceremonial feast to trim the girl's regrown hair.

841 Subsequent menstruations entail few restrictions: a woman stays in her yard because the spirits of certain trees may injure her with an arrow and because contact with her would make a man inefficient in any undertaking.

836 **Marriage and adulthood.**—Sexual intercourse with prepubescent girls is unthinkable; with young women it brings shame on the whole family. There is no instance of ravishment. Rape is a grave offense to the parents.

584 A request for marriage is made to the girl's paternal uncle, but if the girl refuses peremptorily, she cannot be forced to marry. Public notice